

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 April 2004 (15.04.2004)

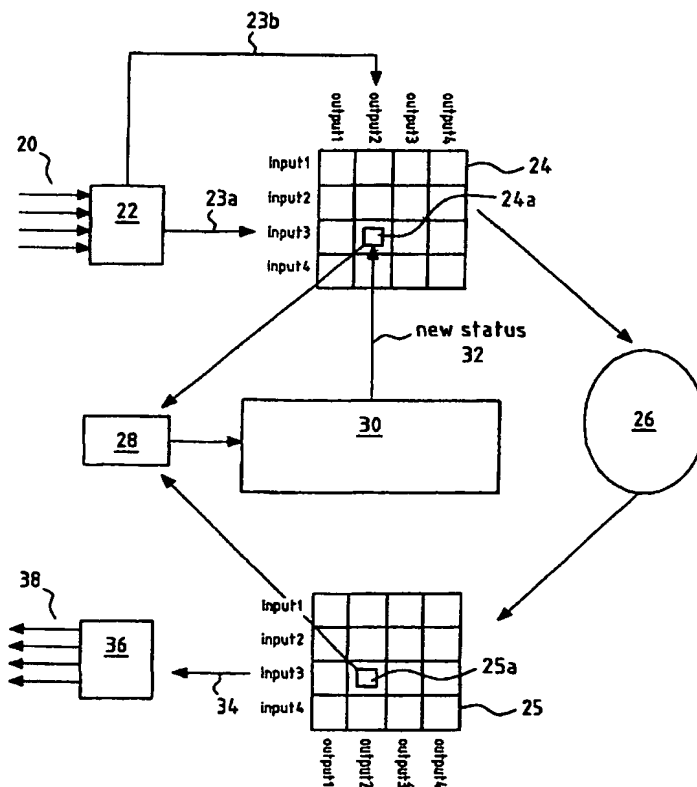
PCT

(10) International Publication Number
WO 2004/032431 A1

- (51) International Patent Classification⁷: H04L 12/56
- (21) International Application Number: PCT/IB2003/004133
- (22) International Filing Date: 23 September 2003 (23.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 02102407.0 2 October 2002 (02.10.2002) EP
- (71) Applicant (for DE only): PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH [DE/DE]; Stein-damm 94, 20099 Hamburg (DE).
- (71) Applicant (for all designated States except DE, US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WAGENINGEN VAN, Andries [NL/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). REUMERMAN, Hans-Juergen [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). LELKENS, Armand [NL/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). UNGERMANN, Joern [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). SCHOE-NEN, Rainer [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
- (74) Agent: VOLMER, Georg; Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

[Continued on next page]

(54) Title: WEIGHT ADAPTION IN PACKET SWITCHES



(57) Abstract: The invention relates to a method, a packet switched and a use of a packet switch for configuring a cross-connection matrix within switching means based on status information provided by port controllers of input/output means. By providing generic functions within an arbiter to change weight-values provided by the port controller in order to anticipate the effect of the arbitration result to the weight-values, the bandwidth for status information communication may be reduced.



GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

 International Application No
 PC 03/04133

 A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04L12/56

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 602 916 A (HEWLETT PACKARD CO) 22 June 1994 (1994-06-22)	1,8,9
A	abstract; claims 1-4; figures 1,2 column 2, line 54 -column 3, line 10 column 4, line 34 - line 47 column 5, line 14 - line 19	2
X	WO 00 38376 A (JOHNSON IAN DAVID ;PIEKARSKI MAREK STEPHEN (GB); POWER X LIMITED () 29 June 2000 (2000-06-29)	1,8,9
A	abstract; claims 1,2,6 page 1, line 18 -page 2, line 8 page 3, line 14 -page 4, line 18 page 5, line 1 - line 2	3,5-7
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

19 February 2004

Date of mailing of the international search report

26/02/2004

Name and mailing address of the ISA

 European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Matos, N

INTERNATIONAL SEARCH REPORT

International Application No

PC 03/04133

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2001/050916 A1 (KRISHNA PATTABHIRAMAN ET AL) 13 December 2001 (2001-12-13) abstract; claims 1,21,28,30,46 paragraphs '0002!', '0008!', '0009!', '0021!', '0051!', '0053!', '0056!', '0058!', '0059!', '0061!', '0083! -----	1,8,9

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PC 03/04133

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0602916	A	22-06-1994	EP 0602916 A2	22-06-1994
			JP 7306843 A	21-11-1995
WO 0038376	A	29-06-2000	AU 1398900 A	12-07-2000
			CA 2353622 A1	29-06-2000
			CN 1338168 T	27-02-2002
			EP 1142229 A1	10-10-2001
			WO 0038376 A1	29-06-2000
			JP 2002533995 T	08-10-2002
US 2001050916	A1	13-12-2001	AU 750787 B2	25-07-2002
			AU 2598099 A	23-08-1999
			CA 2319585 A1	12-08-1999
			EP 1055350 A1	29-11-2000
			WO 9940754 A1	12-08-1999